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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/754,026 | 01/08/2004 | Avoki M. Omekanda | DP-310298 | 6093 |
| 22851 | 7590 | 05/16/2006 | EXAMINER | |
| DELPHI TECHNOLOGIES, INC. M/C 480-410-202 PO BOX 5052 TROY, MI 48007 | | | AURORA, REENA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2862 | |

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | | | |
|------------------------------|-------------------------------|---------------------------------|--|
| Office Action Summary | Application No. 10/754,026 | Applicant(s) OMEKANDA ET AL. | |
| | Examiner Reena Aurora | Art Unit 2862 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is in response to amendment received on 03/10/06.

Claims 1 – 24 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1 – 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Pointer (6,77,065).

As to claim 1, Pointer discloses an apparatus for sensing rotary position for electrical rotary actuators comprising a ring magnet (32, fig. 1) couplable to the rotatable member (18), the magnet (32) defining magnetic flux lines, the magnetic flux lines having a magnetic flux direction within the magnet and emanating from a magnetic pole (N) of a surface of the ring magnet and returning to an opposite magnetic pole (S) of a

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second magnetic surface, portions of the magnetic flux lines being main flux lines emanating away from the magnet and aligned within 45 degrees with the direction of magnetization, and portions of the magnetic flux lines being return flux lines returning in directions forming an angle of more than 45 degrees with the direction of magnetization (fig. 2 and 3); and at least one magnetic field sensor (30) disposed in at least one of the return flux lines and outputting a signal representative of the angular position of the magnet (col. 3, lines 33 - 57).

As to claims 9 and 10, Pointer discloses an apparatus for sensing rotary position for electrical rotary actuators comprising providing a disk-shaped magnet (32, fig. 1) defining magnetic flux lines, said magnetic flux lines having a magnetic flux direction within the magnet (32) and emanating from a magnetic pole (N) of a first surface of said disk-shaped magnet and returning to an opposite magnetic pole (S) of a second surface of said disk-shaped magnet, portions of the magnetic flux lines being main flux lines emanating away from the magnet and aligned within 45 degrees with the direction of magnetization (fig. 2, 3) and portions of the magnetic flux lines being return flux lines returning in directions forming an angle of more than 45 degrees with the direction of magnetization; sensing magnetic flux in at least one of the return flux lines; and outputting a signal representative of the angular position of the magnet (30), based on the sensing act (col. 3, lines 33 - 57).

As to claim 17, Pointer discloses an apparatus for sensing rotary position for electrical rotary actuators comprising magnetic means (32, fig. 1) for generating magnetic field having magnetic flux lines (Note fig. 2), wherein said magnetic flux lines

have a magnetic flux direction within the magnetic means (32) and emanate from a magnetic pole (N) of a first surface of said magnetic means and return to an opposite magnetic pole (S) of a second surface of said magnetic means, portions of the magnetic flux lines being main flux lines emanating away from the magnet and aligned within 45 degrees with the direction of magnetization, and portions of the magnetic flux lines being return lines returning in directions forming an angle of more than 45 degrees with the direction of magnetization (Note fig. 2 and 3); and sensing means (30) disposed in said return flux lines generated by the magnetic means (32) for outputting a signal representative of an angular position (col. 3, lines 33 - 57).

As to claim 18, Pointer discloses that the magnet means is a ring magnet (32, fig. 1) and the sensing means is a sensor (col. 3, lines 33 - 34).

As to claim 2, Pointer discloses that the sensor (30, fig. 1) is disposed radially outside of an outer diameter of the magnet (32).

As to claims 3, 11 and 19, Pointer discloses that the sensor (30) is a Hall effect sensor (col. 3, lines 33 - 35).

As to claims 4, 12 and 20, Pointer discloses that the sensor (30) is oriented to sense a radial component of magnetic flux (fig. 2).

As to claims 5, 13 and 21, Pointer discloses that the sensor (30) is located in a radial return flux line at a location where the radial return flux line is substantially parallel to an annular surface of the magnet (fig. 4).

As to claims 6, 14 and 22, Pointer discloses that the sensor (30) is oriented to sense an axial component of magnetic flux (fig. 3).

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As to claims 7, 15 and 23, Pointer discloses that the magnet 30) defines a central axis and a plane perpendicular to the axis, the sensor (30) being disposed substantially in the plane:

As to claims 8, 16 and 24, Lutz discloses that the rotatable member (18) is a vehicle component (col. 3, lines 7 - 9).

Response to Arguments

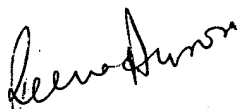
Applicant's arguments with respect to claims 1 - 24 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Reena Aurora', is positioned above the printed name.

Reena Aurora